PERCENTAGE LOG OF WATER-WELL CUTTINGS UTAH GEOLOGICAL SURVEY

DWRi Appropriation #: 08-63-005-M00 Well Owner: Central Utah Correctional Facility

Location: (D-19-1)8bcc, Sanpete County Win #: 431647

Driller: Midway Drilling Geologist: Janae Wallace, 12/3/08

						Geologist. Janae Wanaee, 12/3/08
_		PE	CRCEN	TAG:	ES	
	epth ange	dis*	consolidated			COMMENTS
(feet)	css*	slt*	ss*	lst*	
0	70	0	0	0	0	no sample
70	80	0	0	0	100	gray and minor purple-tan micritic limestone; trace pyrite; calcareous; Green River Formation?
80	85	0	0	0	100	light gray limestone; trace pyrite; calcareous
85	90	0	0	0	100	"
90	95	0	0	0	100	green-gray, gray, and purple-brown limestone; trace algal limestone (crenulated); trace pyrite; calcareous
95	100	0	0	0	100	"
100	105	0	0	0	100	green-gray and trace pink-tan limestone; some fossils; mica and pyrite; calcareous
105	110	0	0	0	100	44
110	115	0	0	0	100	" some oolitic limestone
115	120	0	0	0	100	44
120	125	0	0	0	100	green-gray micritic limestone; trace pyrite; calcareous
125	130	0	0	10	90	green and olive-green and gray limestone and micritic limestone with minor fine-grained micaceous sandstone; calcareous
130	135	0	0	tr	100	green limestone and micritic limestone; trace green micaceous sandstone; calcareous

^{*}dis=disaggregated; css=clay, silt, and/or sand; slt=siltstone/mudstone; ss=sandstone; lst=limestone, sandy limestone, and shaley limestone

		PE	CRCEN	NTAG	ES	
	epth ange	dis*	consolidated		d	COMMENTS
	feet)	css*	slt*	ss*	lst*	
135	140	0	0	0	100	tan and green micritic limestone; fissile; calcareous
140	145	0	50	0	50	brown and minor green-brown shale/siltstone and limestone; trace brown-black varves and pyrite; calcareous
145	150	0	10	0	90	green and minor brown limestone and shale/siltstone with trace pink pebbly limestone; trace pyrite; calcareous
150	155	0	0	0	100	green-gray micritic limestone; trace pyrite; calcareous
155	160	0	0	0	100	٠٠
160	165	0	50	0	50	tan, brown, and green-gray micritic limestone and shale/siltstone; trace microfossils and pyrite; trace algal fossil material?; calcareous
165	170	0	10	0	90	tan, brown, gray, green, and pink limestone and oolitic limestone with minor siltstone/shale; microfossils?; calcareous
170	175	0	0	0	100	green and green-gray with trace pink-tan limestone; some mica; trace pyrite and microfossils?; calcareous
175	180	0	tr	tr	100	" and trace varved siltstone and sandstone
180	185	0	0	tr	100	green-gray, tan, and yellow limestone with trace silicified limestone?, and breccia?; some oolitic limestone; calcareous
185	190	0	0	tr	100	٠.
190	195	0	2	tr	98	green, gray, tan, and yellow limestone with brown siltstone/shale and trace green micaceous sandstone; some limestone is oolitic and some is yellow silicified limestone; trace pyrite and rounded chert clasts; calcareous

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		PE	RCEN	NTAG	ES	
	epth ange	dis*	consolidated			COMMENTS
	feet)	css*	slt*	ss*	lst*	
195	200	0	tr	tr	100	green, gray, and yellow limestone and shaley limestone; some chert; trace siltstone and silicified limestone?; calcareous
200	205	0	tr	0	100	" some brecciated limestone; no sandstone
205	210	100	0	tr	0	green and tan silt- and sand-sized shaley limestone; trace yellow sandstone; calcareous
210	215	75	0	0	25	green-gray, tan, and yellow shaley limestone with silt- and sand-sized shaley limestone and minor silicified limestone; some oolitic limestone; calcareous
215	220	0	0	0	100	white-gray and green-gray limestone; trace crenulated limestone (algal?) and oolitic limestone; trace pyrite; calcareous
220	225	98	0	0	2	green and trace yellow sand-sized shaley limestone and silicified limestone; trace pyrite; calcareous
225	230	98	0	0	2	"
230	235	95	0	0	5	"white-gray and trace green
235	240	95	0	0	5	"trace oolitic limestone
240	245	95	0	0	5	"
245	250	0	0	0	100	light green limestone and yellow silicified limestone; trace oolitic limestone; calcareous
250	255	0	0	0	0	no sample
255	260	0	0	tr	100	green, tan-gray, and yellow limestone and silicified limestone; trace sandstone and oolitic limestone; calcareous

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			RCEN	NTAG]	ES	
	epth ange	dis*	conso	olidate	d	COMMENTS
	feet)	css*	slt*	ss*	lst*	
260	265	0	20	75	5	dark green and minor pink-orange limestone, sandy limestone, fine-grained sandstone and siltstone with green mica and rounded chert clasts; trace brecciated limestone; trace oolitic limestone; pyrite; calcareous
265	270	0	20	75	5	46
270	275	25	25	25	25	light green-gray and yellow tan limestone, silty limestone (or limey siltstone), sandy limestone (or limey sandstone), trace pyrite, chert, and oolitic limestone; slightly calcareous
275	280	25	25	25	25	"
280	285	0	tr	80	20	dark and medium green fine-grained sandstone and pink limestone; some micaceous sandstone; trace oolitic limestone and algal limestone; trace chert; trace siltstone; slightly calcareous
285	290	0	0	90	10	"no siltstone
290	295	0	0	10	90	pink-yellow limestone with dark and medium green fine-grained sandstone; some oolitic and silicified limestone; trace pyrite and algal limestone?; calcareous
295	300	0	0	10	90	" fine- to medium-grained sandstone
300	305	0	0	50	50	66
305	310	0	0	50	50	٠.
310	315	90	0	tr	10	light green, gray, and pink-yellow sand, limestone, and sand-sized limestone fragments; some rounded black chert (gravel clasts?); some silicified limestone; calcareous

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		PE	RCEN	TAG	ES	
	epth ange	dis*	s* consolidate		d	COMMENTS
	feet)	css*	slt*	ss*	lst*	
315	320	80	0	10	10	light green, gray, and pink-yellow sand, sandstone, limestone, and sand-sized limestone fragments; some rounded black chert (gravel clasts?); some silicified limestone; calcareous
320	325	0	20	tr	80	gray, green, pink-tan, yellow, and brown-purple siltstone, and limestone; trace sandstone and oolitic and silicified limestone; trace rounded clasts (gravel?); trace gypsum; calcareous
325	330	0	10	tr	90	٠٠
330	335	0	tr	tr	100	gray, yellow, tan, green, and brown limestone, oolitic limestone, and silicified limestone; trace sandstone and siltstone; some rounded clasts; calcareous
335	340	80	0	10	10	green sand and silt with yellow and gray limestone, silicified limestone, and oolitic limestone; some chert; calcareous
340	345	0	0	0	100	green, gray, and yellow-tan limestone, silicified limestone, and oolitic limestone; some chert and chalcedony; calcareous
345	350	0	0	0	100	"
350	355	0	0	0	100	"
355	360	0	tr	0	100	"trace siltstone
360	365	10	80	tr	10	green and red sand, silt, siltstone, and tan limestone (some silicified); trace micaceous sandstone; slightly calcareous; Colton Formation?
365	370	0	100	0	tr	red and green siltstone; trace limestone and silicified limestone; slightly calcareous
370	375	0	100	0	tr	"
375	380	0	100	0	tr	44

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		PE	ERCEN	TAG	ES	
	epth ange	dis*	consolidated			COMMENTS
	feet)	css*	slt*	ss*	lst*	
380	385	0	100	0	tr	"
385	390	0	100	0	tr	"
390	395	0	100	0	tr	"
395	400	10	90	0	tr	red-brown and green siltstone with minor brown and green clay and trace gray limestone; slightly calcareous
400	405	0	98	0	2	red and green siltstone with minor yellow and gray limestone; slightly calcareous
405	410	10	80	0	10	red and green clay and siltstone with minor gray silicified and oolitic limestone; calcareous
410	415	2	96	0	2	"
415	420	0	100	0	tr	red and green siltstone; trace breccia and silicified limestone; slightly calcareous
420	425	0	95	tr	5	red and green siltstone with gray limestone; some silicified and oolitic limestone (breccia?) And trace sandstone; slightly calcareous
425	430	20	80	tr	tr	red and green siltstone with brown clay and sand and trace sandstone and limestone; slightly calcareous
430	435	20	50	30	tr	red and green siltstone and fine-grained sandstone with brown clay and sand; trace limestone; trace pyrite; slightly calcareous
435	440	20	40	40	tr	"
440	445	0	75	25	tr	red-brown siltstone and fine-grained sandstone; trace limestone and chert; slightly calcareous
445	450	0	60	30	10	red-brown and green siltstone and pink sandstone (some micaceous) and gray limestone; trace chert; slightly calcareous

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		PE	ERCEN	NTAG	ES	
	epth ange	dis*	consolidated			COMMENTS
	feet)	css*	slt*	ss*	lst*	
450	455	10	50	30	10	red-brown and green sand, siltstone, and pink sandstone (some micaceous) and gray limestone; trace chert; slightly calcareous
455	460	0	80	10	10	red-brown and green siltstone and pink sandstone (some micaceous) and gray limestone; trace chert; slightly calcareous
460	465	0	90	10	tr	"trace limestone
465	470	0	10	90	tr	"
470	475	0	50	50	tr	"
475	480	0	50	50	tr	"
480	485	0	50	50	tr	"
485	490	0	90	10	tr	"
490	495	20	80	0	tr	red-brown and green siltstone and pink clay; trace gray and yellow limestone; slightly calcareous
495	500	0	100	tr	tr	red and minor green, gray, and yellow mudstone and siltstone; trace sandstone and limestone; slightly calcareous
500	505	0	0	0	0	no sample
505	510	0	90	10	tr	red and minor green, gray, and yellow mudstone and siltstone with minor fine-grained sandstone; trace limestone; slightly calcareous
510	515	0	90	10	tr	"
515	520	0	90	10	tr	red and minor green, gray, and yellow mudstone and siltstone with minor fine-grained sandstone; trace limestone; slightly calcareous
520	525	0	50	50	0	" no limestone

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		PE	RCEN	NTAG:	ES	
	epth ange	dis*	conso	olidate	d	COMMENTS
	feet)	css*	slt*	ss*	lst*	
525	530	0	10	90	0	"
530	535	0	50	50	tr	"trace limestone
535	540	0	10	90	0	"no limestone
540	545	0	50	50	tr	"trace limestone
545	550	0	90	10	tr	"
550	555	0	50	50	tr	"
555	560	0	50	50	tr	"
560	565	0	50	50	tr	"
565	570	0	50	50	tr	"
570	575	0	10	90	tr	"
575	580	0	50	50	tr	"
580	585	0	50	50	tr	"
585	590	0	90	10	0	" no limestone; dominantly red
590	595	0	90	10	0	"dominantly green
595	600	0	90	10	0	"red-brown and green
600	605	50	25	25	0	brown clay with red and green siltstone and fine- grained sandstone; trace pyrite; slightly calcareous
605	610	0	90	10	0	green and red siltstone/mudstone and fine-grained sandstone; slightly calcareous
610	615	0	50	50	0	"
615	620	0	90	10	0	green and red siltstone/mudstone and fine-grained sandstone; slightly calcareous
620	625	0	90	10	0	"

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		PE	RCEN	NTAG	ES	
	epth ange	dis*	conso	olidate	d	COMMENTS
	feet)	css*	slt*	ss*	lst*	
625	630	0	90	10	0	"
630	635	0	90	10	0	"
635	640	0	90	tr	10	green, gray, and minor red siltstone with minor gray limestone; trace sandstone; calcareous
640	645	0	20	tr	80	green and white-gray limestone, oolitic limestone and ostracod-rich limestone with minor red siltstone and trace sandstone; calcareous; Flagstaff Limestone?
645	650	0	10	tr	90	" gray and minor green and red
650	655	0	20	tr	80	"
655	660	0	10	tr	90	٠٠
660	665	0	10	tr	90	<i>د</i> د
665	670	0	2	tr	98	" gray tan and minor green and red
670	675	0	tr	0	100	white-gray and tan limestone with trace green and red siltstone; some limestone is oolitic and has microfossils; calcareous
675	680	0	tr	0	100	ι.
680	685	0	2	0	98	white-gray and tan limestone with minor green and red siltstone; some limestone is oolitic and has microfossils; calcareous
685	690	0	2	0	98	"
690	695	0	tr	0	100	"trace siltstone
695	700	0	tr	0	100	٠.
700	705	0	2	0	98	white-gray and tan limestone with trace green and red siltstone; some limestone is oolitic and has microfossils; calcareous

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		PE	RCEN	NTAG:	ES	
	epth ange	dis*	conso	olidate	d	COMMENTS
	feet)	css*	slt*	ss*	lst*	
705	710	0	2	0	98	"
710	715	10	30	30	30	red, green, gray, and tan clay, sand, siltstone, sandstone, and limestone; calcareous
715	720	10	40	10	40	"
720	725	10	30	10	50	white-gray, red, green, gray, and tan clay, sand, siltstone, sandstone, and limestone; trace brecciated and oolitic limestone; calcareous; possible fault or fractured zone?
725	730	25	5	tr	70	"trace sandstone
730	735	5	10	tr	85	"
735	740	5	45	tr	50	"trace pyrite and gypsum
740	745	5	45	5	45	"
745	750	5	45	5	45	"
750	755	10	10	tr	80	red sand, siltstone, and mudstone with gray-white limestone; some oolitic limestone and some with microfossils; trace sandstone; trace calcite chips; calcareous
755	760	0	95	tr	5	red siltstone with minor green and yellow limestone; some oolitic limestone; trace sandstone; slightly calcareous
760	765	0	20	tr	80	" gray, red, and green
765	770	0	tr	tr	100	gray-white limestone; some oolitic limestone and some with microfossils; trace red sandstone and siltstone; calcareous
770	775	0	5	tr	95	gray limestone with red and green siltstone; some limestone is oolitic and ostracod rich, some contain gravel clasts; oncolite?; calcareous

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	_	PE	RCEN	NTAG]	ES	
	epth ange	dis*	consolidated slt* ss* lst*		d	COMMENTS
(1	feet)	css*			lst*	
775	780	0	2	tr	98	"
780	785	0	10	tr	90	gray-white, red, and green, and yellow siltstone and limestone; some oolitic limestone; trace sandstone; trace chert; calcareous
785	790	0	10	tr	90	" trace pyrite
790	795	0	2	tr	98	"
795	800	0	2	tr	98	"
800	805	0	10	tr	90	"
805	810	0	50	tr	50	red, gray, green, and white siltstone, sandy limestone, and limestone; some oolitic limestone; trace sandstone; trace pyrite; slightly calcareous
810	815	0	50	tr	50	66
815	820	0	50	tr	50	66
820	825	0	90	tr	10	66
825	830	0	80	0	20	red, gray, green, yellow siltstone, mudstone, and limestone; some limestone is oolitic and silicified; trace chert; slightly calcareous
830	835	0	95	0	5	"
835	840	0	75	0	25	"some black chert; calcareous
840	845	0	50	0	50	"
845	850	0	10	0	90	gray-tan limestone and sandy limestone with red and green siltstone; some limestone is oolitic and some has microfossils; some gravel clasts?; calcareous

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	Donth		RCEN	NTAG	ES	
	epth ange	dis*	consolidated			COMMENTS
	feet)	css*	slt*	ss*	lst*	
850	855	0	50	tr	50	red, green, gray, and yellow siltstone, mudstone, and limestone; some limestone is oolitic and silicified; trace sandstone; trace pyrite and chert; slightly calcareous
855	860	0	75	tr	25	"trace chalcedony
860	865	25	50	tr	25	green, gray, and minor red and yellow siltstone, mudstone, and limestone; some limestone is oolitic, silicified, and ostracod rich; trace chert, breccia, and mica-rich sandstone; calcareous
865	870	0	90	0	10	green, red, and gray mudstone, siltstone, and limestone; trace chert; calcareous
870	880	0	80	0	20	" some oolitic limestone and trace limestone breccia
880	890	0	50	0	50	"
890	900	0	33	34	33	pink, yellow, green, and gray sandstone, siltstone, mudstone, and limestone; calcareous
900	910	0	10	45	45	pink, yellow, green, white, and gray sandstone, siltstone, mudstone, and limestone; some oolitic limestone and trace breccia; trace pyrite; calcareous
910	920	0	tr	50	50	gray and minor green limestone and sandstone; trace siltstone; some oolitic and brecciated limestone; trace pyrite; calcareous
920	930	0	tr	5	95	" gray and minor red
930	940	0	20	5	75	gray, red, and minor green siltstone, mudstone, sandstone, and limestone; some oolitic and trace limestone breccia; trace chert and pyrite; calcareous
940	950	0	0	0	0	no sample

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